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| APPLICATION NO | Э.     | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------|--------|-------------|----------------------|---------------------|------------------|
| 10/824,115     |        | 04/13/2004  | Klaus Voigtlaender   | 10191/3534          | 6452             |
| 26646          | 7590   | 07/05/2005  | EXAMINER             |                     | INER             |
| KENYO          | N & KE | NYON        | PHAN, THO GIA        |                     |                  |
| ONE BRO        |        | -           | ART UNIT             | PAPER NUMBER        |                  |
| NEW YO         | KK, NY | 10004       | 2821                 |                     |                  |
|                |        |             |                      | 2021                |                  |

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   | Application No.                     | Applicant(s)   |                     |  |  |  |  |  |
|---|---|-------------------------------------|--|---------------------|--|--|--|--|--|
|   | 000 4 4 0   | 10/824,115                          | VOIGTLAENDER   | VOIGTLAENDER ET AL. |  |  |  |  |  |
|   | Office Action Summary   | Examiner                            | Art Unit   |                     |  |  |  |  |  |
|   |   | Tho G. Phan                         | 2821   |                     |  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |   |                                     |  |                     |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                                     |  |                     |  |  |  |  |  |
| Status  |   |                                     |  |                     |  |  |  |  |  |
| 1)🛛   | Responsive to communication(s) filed of   | on <u>13 <i>April 2004</i></u> .    |  |                     |  |  |  |  |  |
| 2a) <u></u> □   | This action is <b>FINAL</b> . 2b)   | oxtimes This action is non-final.   |  |                     |  |  |  |  |  |
| 3)  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is         |                                     |  |                     |  |  |  |  |  |
|   | closed in accordance with the practice  | under <i>Ex parte Quayle</i> , 1935 | 5 C.D. 11, 453 O.G. 213.                                       |                     |  |  |  |  |  |
| Disposition of Claims   |   |                                     |  |                     |  |  |  |  |  |
| 4) 🛛  | ☑ Claim(s) <u>1-12</u> is/are pending in the application.   |                                     |  |                     |  |  |  |  |  |
|   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                                     |  |                     |  |  |  |  |  |
| 5)  | Claim(s) is/are allowed.  |                                     |  |                     |  |  |  |  |  |
|   | Claim(s) <u>1-3</u> is/are rejected.  |                                     |  |                     |  |  |  |  |  |
| •   | Claim(s) <u>4-12</u> is/are objected to.  |                                     |  |                     |  |  |  |  |  |
| لــا(8  | Claim(s) are subject to restriction   | n and/or election requiremen        | ll.  |                     |  |  |  |  |  |
| Application Papers  |   |                                     |  |                     |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.   |   |                                     |  |                     |  |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |   |                                     |  |                     |  |  |  |  |  |
|   | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                 |                                     |  |                     |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |                                     |  |                     |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |                                     |  |                     |  |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:  |   |                                     |  |                     |  |  |  |  |  |
| <ul> <li>1. ☐ Certified copies of the priority documents have been received.</li> <li>2. ☐ Certified copies of the priority documents have been received in Application No</li> </ul>   |   |                                     |  |                     |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |                                     |  |                     |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |   |                                     |  |                     |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |                                     |  |                     |  |  |  |  |  |
|   |   |                                     |  | -                   |  |  |  |  |  |
| Attachment  | t(s)  |                                     |  |                     |  |  |  |  |  |
|   | e of References Cited (PTO-892)   |                                     | view Summary (PTO-413)   |                     |  |  |  |  |  |
| 3) 🔲 Inform   | e of Draftsperson's Patent Drawing Review (PTO-<br>nation Disclosure Statement(s) (PTO-1449 or PTO<br>r No(s)/Mail Date | D/SB/08) 5) 🔲 Notic                 | er No(s)/Mail Date ce of Informal Patent Application (PT<br>r: | O-152)              |  |  |  |  |  |

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#### **DETAILED ACTION**

## Claim Objections

1. Claim 4 is objected to because of the following informalities:

In claim 4, line 2, "the wheel" should change to –a wheel--.

In claim 4, line 5, "the horizontal" should change to -a horizontal --.

Appropriate correction is required.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Shimura (6,791,457).

Shimura in figures 1 and 3-12 discloses a plurality of stationary primary antennas 201-202 (the antennas being integrated within the stationary device 500); and a plurality of secondary antennas 101-102 situated on a rotating body (figure 3,7); wherein a first primary antenna 202 transmits electrical energy to the secondary antennas 102, and a second primary antenna 201 is provided for at least bidirectional (see arrow). communications for data exchange with the secondary antennas 101, and

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wherein the secondary antennas are positioned on a carrier band placed on the rotating body (the transponder 100 or 400 being disposed on a steel belt of a tire, figure 7).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimura in view of Benedict et al (6,722,192).

Shimura has been discussed above but fails to teach the carrier band is a rim band positioned on a circumference of a wheel rim. However, Benedict et al in figures 1-3 disclose at least one antenna 2 (column 6, lines 29-30, column 7, line 17) positioned on a circumference of a wheel rim 5 (figure 1). It would have been obvious to provide Shimura with the carrier band is a rim band positioned on a circumference of a wheel rim so that the data can be readily transmitted back and forth between the antennas (see column 2, lines 12-15).

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### Allowable Subject Matter

- 5. Claims 5-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Claim 4 would be allowable if rewritten to overcome the above listed objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter: The claims are allowable over the art of record because the prior art does not teach the primary antennas are situated on the wheel housing of a vehicle, and wherein the main emitting direction of the primary antennas is towards the direction of a corresponding wheel in the wheel housing, and at an angle downwards relative to the horizontal plane of a road surface below the wheel.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to *Aaltonen, Faetanini, Lin and Ogawa et al.* are cited as of interested and illustrated a similar structure to a system for wireless data transmission.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho G. Phan whose telephone number is 571-272-1826. The examiner can normally be reached on M-F, 9:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

The G Phan
Primary Examiner
Art Unit 2821